

REMARKS

Reconsideration and allowance of this application are respectfully requested in light of the amendment and the following remarks.

The abstract has been amended to overcome the objection applied thereto.

Claims 9-15 and 18-29 stand withdrawn as being directed toward non-elected subject matter.

Claims 1-8, 16, and 17 stand rejected, under 35 USC §102(b), as being anticipated by Komiya et al. (2002/0042035). The Applicants respectfully traverse these rejections as follows.

Claim 1 defines a hydrogen generator including, *inter alia*, a water evaporator that receives water and feed gas and provides steam and the feed gas to a reforming catalyst body.

The Office Action proposes that Komiya's pre-heat layer 51a corresponds to the Applicants' claimed water evaporator and cites Komiya's disclosure in paragraph [0088] to support this inference (see Office Action page 4, lines 3-6).

However, Komiya discloses, in paragraph [0088], that pre-heat layer 51a receives raw gas material and steam through a heating channel 48 (see Komiya paragraph [0088], lines 2-5, paragraph [0089], lines 6-9, paragraph [0091], lines 5-7, and paragraph [0100], lines 5-7). Nowhere does Komiya disclose that pre-heat layer 51a receives water or that water is evaporated by pre-heat layer 51a. Instead, Komiya discloses that pre-heat layer 51a further heats steam and raw gas material received through heating channel 48 (see paragraph [0101], lines 1-4).

Moreover, Komiya discloses, in Fig. 1 and the last sentence of paragraph [0086], that the flow through heating channel 48 is downward in the space formed between a seventh cylinder 67 and a sixth cylinder 66 and upward in a space formed between sixth cylinder 66 and a fifth

cylinder 65. The gravitational force prevents an upward flow of liquid water in the space between sixth cylinder 66 and fifth cylinder 65; Thus, it necessarily follows that the flow through heating channel 48 is that of steam.

With regard to the Office Action's proposal that the time and location of water evaporation within Komiya's heating channel 48 depends on the conditions of the applied process (see Office Action page 4, lines 6-7), the Applicants note that Komiya expressly discloses that the evaporation occurs within heating channel 48. Thus, regardless of when and where the evaporation occurs within heating channel 48 it necessarily occurs within heating channel 48 and not in pre-heat layer 51a.

Simply stated, because Komiya's pre-heat layer 51a receives only steam and raw gas material, it necessarily follows that Komiya's pre-heat layer 51a cannot evaporate liquid water and cannot reasonably be construed as a water evaporator (i.e., a device that transforms liquid water into gaseous water).

As a result, Komiya does not identically disclose the claimed subject matter of a water evaporator that receives water and feed gas and provides steam and the feed gas to a reforming catalyst body. Thus, it is submitted that the 35 USC 102(b) rejection is unfounded and should be withdrawn.

Accordingly, the Applicants submit that Komiya does not anticipate the subject matter defined by claim 1. Therefore, allowance of claim 1 and all claims dependent therefrom is warranted.

In view of the above, it is submitted that this application is in condition for allowance, and a notice to that effect is respectfully solicited.

If any issues remain which may best be resolved through a telephone communication, the Examiner is requested to telephone the undersigned at the local Washington, D.C. telephone number listed below.

Respectfully submitted,

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Date: December 4, 2009
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